

SANTA CRUZ HARBOR

*Gateway to the Monterey Bay
National Marine Sanctuary*

May 22, 2001

MS
Ms. Mary D. Nichols, Secretary
c/o Brian Baird, Ocean Program Manager
Resources Agency of California
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Secretary Nichols:

Thank you for initiating the proceeding on coastal erosion. This is an innovative measure that has long been needed. It will surely benefit this invaluable California coast.

Santa Cruz Harbor is on the forefront of the beach protection initiative. The harbor conducts a channel dredging / beach replenishment program which places 200,000 to 300,000 cubic yards of sand on the downcoast beaches each year, protecting state and county beaches which are integral to the community and the region. The entrance dredging operation moves material which is composed of nearly 100% sand.

Of particular interest to the Port District in coastal policy formation, is the policy on inner-harbor sediment. Inner-harbor sediment is naturally occurring, clean material which can vary in sand content from 20% to 80%. In coastal harbors, such as Santa Cruz Harbor, such material emanates from both the entrance and from watersheds which empty into low-lying harbors. This material has traditionally been excluded from being placed in the nearshore for beach replenishment because of fear that fine-grained fractions would end up on the beach, or smothering nearshore, benthic habitats. Classically, the Environmental Protection Agency (EPA) has used 80% sand as a minimum for allowing sediment to be disposed in the nearshore. However, EPA headquarters has stated¹ that this is a "rule of thumb" guidance in the absence of other data, and that the agency is open to other protocols based on science.

The Port District contends that all clean sediment² which contains sand fractions should be considered for beach or nearshore disposal, if it can be demonstrated on a case-by-case, site specific basis, that the served beach(es) will be replenished by such disposal and that no collateral, unacceptable environmental impacts will be experienced.³

¹ Letter from Environmental Protection Agency (EPA) Headquarters of April 26, 2000 / EPA Region IX letter of December 15, 2000.

² Suitable for aquatic disposal as per EPA standards (tested Tier I, II, III criteria).

³ Such disposal to be analyzed scientifically on a site specific basis.

Santa Cruz Port District proposes this policy adoption because the current standing policy held by various agencies:

1. Requires that mixed sediment materials (less than 80% sand) be either:
 - a. Taken out of the littoral system and dumped in a landfill; or,
 - b. Taken out of the littoral system to an offshore, deep water disposal site.
2. This leaves harbors with costly options which threaten their existence. These disposal methods are in the \$50 to \$75 per cubic yard of material range. The cost of dredging 10,000 cubic yards of sedimentary material deposited into inner-harbor areas from watersheds and other sources can thus cost \$500,000 to \$750,000/year.⁴
3. This leaves harbors with options that require a combination of:
 - Bucket cranes;
 - Barges;
 - Dump trucks;
 - Loaders.

These all have negative environmental impacts equal to or exceeding hydraulic dredging, but are currently preferred by agencies because of arbitrary grain size limitations. Of particular concern are air and road impacts from transport of 10,000 cubic yards / year of material delivered by approximately 600 truck loads, making round trips to the landfill (Santa Cruz Harbor to Marina = 70 mile round trip).

4. Upland disposal, in particular, leaves harbors with turbidity issues, soiled docks, banks and roadways.

Santa Cruz Port District Demonstration Project:

In response to significant sedimentation received from the Arana Gulch watershed in the January 1998 El Niño storm events, the Port District proposed a dredging demonstration project which would deliver 10,000 cubic yards of mixed sediment (42% sand; 58% silts and clays) material to the nearshore in the winter wave environment.

⁴ This is the range of costs for clean, fine-grained material that has less than 80% sand content, and is otherwise suitable for "unconfined aquatic disposal" (EPA terminology).

Preparatory to this demonstration project, the Port District and the California Department of Boating and Waterways funded and authorized a predictive sediment study by GeoSea Consulting which was conducted in Fall 1999. It forecast that such material would be dispersed into the north Monterey Bay without negative impact.

Based on this finding, the regulatory agencies allowed a 3,000 cubic yard demonstration project, which was subsequently executed in March 2001. The preliminary findings of this are:⁵

- There were no negative impacts to the beach or nearshore benthic communities from disposal of fine-grained sediment;
- Downcoast beaches were replenished by sand fractions contained in the material;
- There were no unacceptable turbidity impacts due to dredging operation.

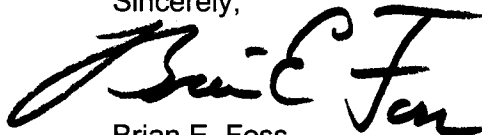
Santa Cruz Port District believes that this demonstration project is an initial step in furthering the concept of "beneficial use." Accordingly, we proposed the following language be added to Section II.C.1. of the draft "Policy on Coastal Erosion" document:

II. Planning and Regulation, Section C.1.

Sediment should not be disregarded for beach replenishment simply based on an arbitrary percentage of sand, silt and clay. Sediment that contains a mixture of fine-grained sand should be considered for beach replenishment, if site specific, scientific analysis can demonstrate that the beach will be replenished by such disposal, and that no collateral, negative environmental impacts will be experienced.

Again, thank you for initiating this program, and for providing us with the opportunity to comment.

Sincerely,



Brian E. Foss
Port Director

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⁵ A full analysis of the Santa Cruz Harbor dredging demonstration project will be available by August 2001.